Industry Advisory Panel/ Review Team 10/29 Meeting
Boothbay, 9:30 am

C**. Discussion**:

What follows is a list of the areas that Industry would like the reviewers to evaluate and comment on. Suggestions should be made primarily in the context of how other state programs in the region are complying with the NSSP:

1) Location of GAC stations as related to harvest/growing areas, fresh water inputs, access points and tide-related issues.

Throughout the coast, there is a high percentage of GAC stations that have no water at low tide (e.g. run 6V-Freeport, Maquoit Bay, Kennebec River, etc). For samplers operating under the April 26, 2007 SOP, it is often impossible to collect low tide samples because there simply isn't any water present at that tidal stage- except for runoff streams and puddles of standing water.
Does FDA require that stations be sampled specifically at low tide, or is "low water" data (collected on low-to-mid tide) acceptable for compliance with FDA's directive that random samples be collected at "all tidal stages"?

2) Distinction between GAC stations vs. pollution monitoring stations.

ME DMR does not distinguish between GAC stations and pollution monitoring stations. From the Random sampling run station maps, it appears that stations located on streams and high on river banks are used for both purposes (e.g. WJ30 (Bunganuc Creek), WI53 (mouth of Cousin's River)). This leads to sample runs that have a great number of stations and thus require ample time and lab resources to sample.
Please comment on the effectiveness of this approach: Would random runs be more manageable if only stations monitoring overlying waters were sampled fro GAC?
Keeping in mind that DMR has limited staff and resources and that on occasion runs don't have the minimum 6 samples/yr required by FDA, having fewer stations per run may make it easier for DMR to comply with FDA regulations.
Is it appropriate to use GAC stations for monitoring both pollution sources and overlying growing waters?

3) Random Sampling method versus Adverse Sampling method for different types of areas.
Maine relies mostly on Random Sampling for GAC. It uses adverse sampling when monitoring pollution, but not for growing area classification. Industry recognizes the

need for upfront investment when using adverse sampling for GAC, yet where there are adversities clearly impacting an area it may be worth considering using this method. How much data needs to be collected before an area can be on an "automatic" trigger? (by "automatic trigger" we mean that the area can be opened or closed when certain conditions are present without the need for testing). Maine does not have the resources to switch to Adverse sampling, but Industry is committed to helping gather data or help fund studies that will make it possible for key areas to be tested under the Adverse Sampling method and operate on "automatic" triggers.

4) Rainfall conditional areas: their role in ME's Growing Area Classification Program; Guidelines on how to manage them.

Despite the length of Maine's coast, there are only three rainfall conditional areas in the whole state (Medomak River, St. George River and Atkins Bay, Kennebec). There are several areas that have enough data that point to the need for rain gauges, including the Cousin's River in Freeport/Yarmouth.

Rainfall Conditional areas consume a large share of DMR's resources: they require extensive testing (to re-open after rainfall events) and expensive notification (newspaper ads to close and re-open the areas). DMR has recently eliminated a number of rainfall conditional areas and is reluctant to instituting any additional ones.

While the financial burden of managing rainfall conditional areas is evident, the productivity of these areas must be taken into account as well. In order to maximize the state's natural resources, Maine's shellfish industry and municipalities are committed to doing whatever is necessary to help institute more conditional areas and manage them. Industry contributions would include, but not be limited to, funding studies that would help determine the "triggers" for such areas.

5) Standard Operating Procedure (SOP) for Water Quality Sampling:
   - Depth for water sample collection

ME's 2007 SOP requires that samplers wade 12-18" and that they plunge the bag 4-10" under the surface. How do these depths compare to those used by other states?

   - Distance from GAC station at which samples may be collected

ME's 2007 SOP allows samplers to walk up to 300' from the GPS location of the GAC station. Is that distance appropriate and most importantly, is it applied consistently by all samplers?

6) Role of salinity to determine the utility of a sample for GAC.

Samples with extremely low salinity are routinely used for growing area classification purposes. Do such samples accurately represent the quality of the overlying waters? Are there ways to determine if/when a sample should be discarded?

7) Access to GAC stations: Land vs. boat.

8) Use of municipal resources and volunteers: Role of DMR-trained personnel, municipal boats and vehicles etc.

For 5) and 6):
Boat sampling is generally considered more accurate than sampling by land: it allows samplers to get to the stations without stirring the bottom and it ensures proper depth when drawing a sample. Nearby states make heavy use of boats when sampling GAC stations.
Sampling a run by boat takes on average ½ the time it takes to do the same run by land.
For safety reasons, ME DMR requires that there always be at least two people when operating a boat. DMR has very few boats and a limited budget. It is therefore unrealistic to expect that the Department will be able to sample by boat.
Many municipalities, however, have access to boats and DMR-trained personnel (wardens) available to aid DMR in collecting samples. In the case of Scarborough, Brunswick, Freeport, Bath and other towns, wardens already sample for DMR. They most often sample by boat (town boats).
Industry members have also offered to provide DMR staff with boat rides when collecting samples.
Could this "volunteer program" be expanded to help alleviate DMR's lack of resources and available staff? There are many towns and wardens who have expressed an interest in helping out.

9) Threshold for initiating a state-wide flood closure.

The state is currently on a 2"-3"/24 hr rain closure: The flood-closure conversation at DMR starts between two and three inches: it may be initiated after two inches based on ground saturation, recent rainfall events, etc. Once rainfall reaches three inches/24 hrs., a state-wide closure goes immediately into effect.
For areas that are susceptible to rainfall but are not classified as rainfall conditional, it is beneficial to have a low trigger (2"). This prevents random samples from being taken when the area is polluted: these samples have a long-term impact on the area's P90 and its long-term classification.
Since state-wide closures have a great impact on a business's bottom line industry members working in areas that are not susceptible to rainfall events prefer a higher trigger (3").
If productive areas that are prone to water quality deterioration after rainfall events (but clean otherwise) were classified "rainfall conditional" the state-wide closure could be initiated at 3". Would this be a reasonable and effective approach?.

10) Method for establishing boundary lines between open and closed areas.

Boundary lines are established by ME DMR at the first station that meets the criteria for a different classification. In many cases stations are spread far apart, sometimes a mile or more (eg Scarborough). The area that lies between a "closed" and an "open" station

is considered "closed." Given that this "in-between" expanse is sometimes large and oftentimes productive, Industry would like to ask that the reviewers evaluate this approach and suggest alternative ways for establishing boundary lines, if appropriate.

Areas that are susceptible to rain but are classified using random sampling/P90s have their own set of issues when it comes to drawing boundary lines: In the case of the Cousin's River, the area that is classified "open" is influenced by rainfall events and should not be permanently open (it is currently open based on P90 calculations). On the other hand, the area that is currently "closed" (restricted) is clean during dry periods and should not be permanently closed.

11) Accelerated sampling for expediting review and possibly the reclassification of existing growing areas. Role of independent laboratories in ME's Progam.

ME DMR collects the minimum six samples/year required by FDA for each GAC station. Areas where pollution abatement plans have successfully eradicated the pollution source (eg a failing septic that has been repaired) are good candidates for accelerated sampling (FDA allows up to 24/samples/year). Currently, accelerated sampling is not conducted by ME DMR due to budgetary and staffing shortfalls. Industry would like to make accelerated sampling possible, either helping in data collection (through the use of trained wardens and municipal personnel or by providing boat rides to DMR staff), or by contracting independent laboratories to process the samples (to this date no independent lab has been certified by DMR to process GAC samples)-or both.

12) Real-time closing and opening of growing areas based on P90 calculations.

In Maine, areas are reclassified only at the time of their annual review. If a certain area shows signs of pollution it still remains open for the remainder of the year (Little River/Recompence, Freeport, 2006). Conversely, an area that has P90s that meet the criteria for re-classification to the open status can't be opened until the date of its annual review (Harpswell, 2007). Are there ways to make the closing and opening of areas more accurate and time-sensitive? What does Industry need to do to help DMR achieve the goal of real-time closing and opening?

13) Hydrographic studies: their role in determination of sampling locations and in growing area classification.

Dye studies are complicated and require in-depth knowledge and experience in dealing with hydrographic issues. DMR-generated studies have sometimes been challenged and questioned. Case in point: The Harraseeket River study.
Please comment on the role of such studies and on the qualifications necessary to conduct them. Is there precedent in other states for contracting dye studies to third party experts?

14) Cross-check method(s) for ensuring that only samples collected under the Random protocol get used for growing area P90 calculations.

Adverse samples have been known to get mixed up with Random samples and used to generate P90s (e.g. Brunswick, Scarborough). Are there methods/programs available to eliminate these mistakes?
As far as calculating the P90s themselves, Massachusetts encourages its WQ staff to double-check computer generated P90 calculations by hand (apparently computer programs are sometimes not accurate)
Is this a real concern? Should Maine be doing likewise?